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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,319	10/23/2000	Tsuneo Kyouno	0675-30	2222

22204 7590 02/21/2002

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EXAMINER

DONOVAN, LINCOLN D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 02/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/601,319

Applicant(s)

Kyouno et al.

Examiner

Lincoln Donovan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 9, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above, claim(s) 4-7 and 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, as best able to be understood in view of the rejections under 35 U.S.C. 112, second paragraph, are rejected under 35 U.S.C. 102(b) as being anticipated by Saito [US 5,528,697].

Saito discloses an electromagnetic actuator [figure 5] comprising:

- a casing [18];
- a coil [25];
- yoke portions [26, 29] defining a gap between poles thereof [figure 5];
- a diaphragm [24];
- first and second vibration plates [24, 27];
- a radially arranged magnet [28] mounted, and suspended, between the vibration plates having its north and south poles parallel to the vibration plates and diaphragm; and
- wherein the diaphragm vibrates producing an audible output when a high frequency current is applied to the coil and the vibration plate [27] vibrates upon application of a low frequency current to the coil.

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is, as best able to be understood in view of the rejections under 35 U.S.C. 112, second paragraph, rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Carlson [US 4,956,868].

Saito disclose the instant claimed invention except for: the casing having a cover being used to provide magnetic shielding.

Carlson discloses an electromagnetic acoustic transducer having a magnetically shielded casing/cover.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the casing design of Carlson for the casing of Saito for the purpose of protecting the actuator from stray magnetic fields.

5. Claims 8-10, as best able to be understood in view of the rejections under 35 U.S.C. 112, second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito.

Saito disclose the instant claimed invention except for: the specific support structure of the vibration plates within the casing.

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The specific support structure used for the magnet components and vibration plates would have been an obvious design consideration based on the specific application of the device.

*Response to Arguments*

6. Applicant's arguments filed 01-09-02 have been fully considered but they are not persuasive.

Applicant argues:

[1]: Saito fails to show the ring magnet having south pole located at a periphery of the ring and the north pole located at an inner periphery of the ring magnet.

[2]: The axes of the poles of Saito are perpendicular to the diaphragm 24.

[3]: Saito fails to show the diaphragm being supported by an elastic piece.

Examiner disagrees:

Regarding [1]: Applicant has not claimed, nor has examiner considered, such a pole alignment.

Regarding [2]: Saito shows the poles being parallel to the diaphragm, see figure 5.

Regarding [3]: Saito shows the diaphragm being supported by elastic member 27 within the basket [Saito column 3, lines 45-60].

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the

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mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

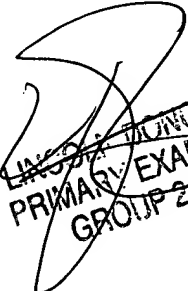
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lincoln Donovan whose telephone number is (703) 308-3111.

The fax number for this Group is (703)308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

LDD

February 19, 2002

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
GROUP 2100